

Remarks

Filed concurrently herewith is a Request for Continued Examination and the specified fee. Accordingly, reconsideration of this Application is respectfully requested.

Claims 1-74 are pending in the application, with claims 1, 13, 25, 36, 49, and 62 being the independent claims. Claims 13-74 have been withdrawn by the Examiner due to an election of species requirement.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 103

Beginning on page 2 of the Office Action, the Examiner rejects claims 1-4 and 6-12 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,404,758 to Wang ("Wang") in view of U.S. Patent No. 5,063,387 to Mower ("Mower"). Applicants respectfully traverse this rejection.

Claim 1 recites:

1. A method for down-converting an electromagnetic signal, comprising the steps of:
 - (1) simultaneously down-converting and performing a matched filtering/correlating operation on a portion of a carrier signal;
 - (2) accumulating the result of the matched filtering/correlating operation of step (1); and
 - (3) repeating steps (1) and (2) for additional portions of the carrier signal.

The combination of features recited in independent claim 1 is neither taught nor suggested by Wang and/or Mower, either alone or in combination.

According to Wang:

In operation, a signal, represented by a waveline 105, is received by the antenna 110. The RF circuit 115 filters the signal 105 and converts the received radio frequency signal to a **baseband** signal . . . The FSC [First Search Code] matched filter 130 . . . further filters the [**baseband**] signal by matching the signal to the FSC.

(Emphasis added.) (See column 6, lines 26-34 of Wang.) Thus, as described by Wang, only the RF circuit 115 operates on the carrier signal represented by waveline 105. FSC matched filter 130 operates on a baseband signal, which by definition does not include a carrier signal. Accordingly, the FSC matched filter 130 of Wang does not perform “a matched filtering/correlating operation on a portion of a carrier signal” as recited in claim 1 of the present application. Furthermore, Wang neither teaches nor suggests “simultaneously down-converting and performing a matched filtering/correlating operation on a portion of a carrier signal” as alleged by the Examiner. These deficiencies of Wang are not overcome by Mower. Thus, claim 1 is patentable over Wang in view of Mower.

Claims 2-4 and 6-12 depend from independent claim 1 and are patentable over Wang and/or Mower, alone or in combination, for at least the same reasons as claim 1, noted above, and further for the specific features recited in these claims.

Reconsideration and withdrawal of this rejection of claims 1-4 and 6-12 are respectfully requested.

Objection To Claim 5

Applicants thank the Examiner for identifying claim 5 as containing allowable subject matter. For at least the reasons presented above, claim 1 is allowable. Thus, claim 5 is not dependent on an unallowable base claim. Reconsideration and allowance of claim 5 are respectfully requested.

Withdrawn Claims 13-74

Consideration and allowance of the species represented by claims 13-74 are respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Reply to Office Action of January 24, 2007

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Appl. No. 09/550,644

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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